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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/939,808	08/28/2001	Muneki Nakao	35.C15838	2948

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EXAMINER
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POON, KING Y

ART UNIT	PAPER NUMBER
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2624

DATE MAILED: 01/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/939,808	<b>Applicant(s)</b> NAKAO ET AL.	
	<b>Examiner</b> King Y. Poon	<b>Art Unit</b> 2624	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 October 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 15-34 is/are pending in the application.
- 4a) Of the above claim(s) 23,24,31,32 and 34 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 15-22,25-30 and 33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. Claims 23, 24, 31, 32, 34 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 10/28/2005.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 25-30 are rejected under 35 U.S.C. 102(e) as being anticipated by Larsson et al (US 6,463,307).

Regarding claim 25: Larsson teaches a communication apparatus, (mobile terminal, column 1, lines 64-67) comprising: a wireless connection device (column 1, lines 7-11) configured to wirelessly connect to an external intelligent terminal (BS, column 3, lines 55-60); the communication apparatus is configured to execute a process for confirming the presence of data (packet in the buffer, fig. 6 and fig. 7) to be transferred between said communication apparatus and the external intelligent terminal connected by said wireless connection device, configured to change a communication state with the external intelligent terminal by said wireless connection device into a state

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of low electric power consumption (column 4, lines 45-55), in accordance with a time period (column 4, line 58) in which no data transmission is performed between said communication apparatus and the external intelligent terminal; and configured to execute a process for confirming the presence of transfer data together (e.g., paging ack, fig. 7) with said confirmation device in place of the external intelligent terminal (BS, fig. 7), in accordance with the change of communication state by said change device (from hibernating to awake, fig. 7).

Regarding claim 26: Larsson teaches wherein said change device changes the state of said wireless connection device from the state of low electric power consumption to a connection state capable of receiving command data or image data between said communication apparatus and the external intelligent terminal when data to be sent from said communication apparatus to the external intelligent terminal is available (416, 418, fig. 4).

Regarding claim 27: Larsson teaches wherein the change by said change device is executed by sending a request for a change of the state from said communication apparatus to the external intelligent terminal (hibernate request, fig. 6).

Regarding claim 28: Larsson teaches wherein said wireless connection device is put into a connection state capable of transmitting and receiving command data or image data between said communication apparatus and the external intelligent terminal in response to a rise of the power source (the power carried by paging signal, fig. 5) of the external intelligent terminal.

Regarding claim 29: Larsson teaches wherein the connection in the low electric power consumption state is such that the external intelligent terminal cannot obtain state information from said communication apparatus (state information is obtained by acknowledge in awake state, column 4, lines 55-62, not in hibernation/low power state).

Regarding claim 30: Larsson teaches wherein the connection state in a wireless connection does not require an initial connection procedure in order for this state to be changed to a connectable state in which the transmitting and receiving of the command data or the image data by said communication apparatus is possible (fig. 5-7, does not show a initial connection procedure during the communication shown in fig. 5-7).

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 15-18, 20, 21, 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Larsson et al (US 6,463,307) in view of Kleinschmidt et al (US 6,085,112).

Regarding claim 15: Larsson teaches a communication apparatus, (mobile terminal, column 1, lines 64-67) comprising: a wireless connection device (column 1, lines 7-11) configured to wirelessly connect to an external intelligent terminal (BS,

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column 3, lines 55-60); the communication apparatus is configured to execute a process for confirming the presence of data (packet in the buffer, fig. 6 and fig. 7) to be transferred between said communication apparatus and the external intelligent terminal connected by said wireless connection device, configured to change a communication state with the external intelligent terminal by said wireless connection device into a state of low electric power consumption (column 4, lines 45-55), in accordance with a time period (column 4, line 58) in which no data transmission is performed between said communication apparatus and the external intelligent terminal; and configured to execute a process for confirming the presence of transfer data together (e.g., paging ack, fig. 7, capacity request, assignment of uplink slot, fig. 6) with said confirmation device in place of the external intelligent terminal (BS, fig. 7), in accordance with the change of communication state by said change device (from hibernating to awake, fig. 7).

Larsson does not teach what the communication device is made of, although it is well known in the art that the function of the communication device is controlled by a processor and its program.

Kleinschmidt teaches a mobile terminal fig. 1, is controlled by a processor and its program (fig. 6, fig. 1, column 6, column 3, lines 49-50, column 3, lines 60-62).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was to have made use of a processor and program to implement Larsson's invention such that the communication apparatus would be cheap, compact and light to carry.

Note: After the modification, the program codes that implement the functions of claim 15 forms the confirmation device, the change device, and execution device.

Regarding claim 16: Larsson teaches wherein said change device changes the state of said wireless connection device from the state of low electric power consumption to a connection state capable of receiving command data or image data between said communication apparatus and the external intelligent terminal when data to be sent from said communication apparatus to the external intelligent terminal is available (416, 418, fig. 4).

Regarding claim 17: Larsson teaches wherein the change by said change device is executed by sending a request for a change of the state from said communication apparatus to the external intelligent terminal (hibernate request, fig. 6).

Regarding claim 18: Larsson teaches wherein said wireless connection device is put into a connection state capable of transmitting and receiving command data or image data between said communication apparatus and the external intelligent terminal in response to a rise of the power source (the power carried by paging signal, fig. 5) of the external intelligent terminal.

Regarding claim 20: Larsson teaches wherein the connection in the low electric power consumption state is such that the external intelligent terminal cannot obtain state information from said communication apparatus (state information is obtained by acknowledge in awake state, column 4, lines 55-62, not in hibernation/low power state).

Regarding claim 21: Larsson teaches wherein the connection state in a wireless connection does not require an initial connection procedure in order for this state to be

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changed to a connectable state in which the transmitting and receiving of the command data or the image data by said communication apparatus is possible (fig. 5-7, does not show a initial connection procedure during the communication shown in fig. 5-7).

Regarding claim 33: It is inherent that a mobile phone's CPU of Kleinschmidt, column 8, line 55 is controlled by a program stored in a storage medium.

6. Claims 19, 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Larsson et al (US 6,463,307) and Kleinschmidt et al (US 6,085,112) as applied to claim 15 and further in view of Haartsen (BLUETOOTH - The universal radio interface for ad hoc, wireless connectivity, Ericsson Review No. 3,1998).

Regarding claim 19: Larsson et al do not teach wherein said wireless connection means performs a communication in conformity to the Bluetooth Standard.

However, Haartsen teaches a wireless communication between two electronic devices in the Bluetooth Standard. See the bolded paragraphs on page 110.

Accordingly, it would have been obvious to one skilled in the art at the time of the invention to have used the Bluetooth Standard wireless communication taught by Haartsen in the communication system comprising the communication apparatus and intelligent terminal taught by Larsson et al. because the teachings of Haartsen teach an Ericsson Company Bluetooth wireless communication method/system that can used in the Ericsson Company wireless communication system taught by Larsson et al.

Regarding claim 22: Larsson et al. teach the communication apparatus (fig 1, Mobile Terminal (MT) 102-112) according to claim 15. Larsson et al. further teach an



active mode (fig 4, steps 416-424, awake state) and a low power consumption mode (fig. 4, step 412, hibernation state) but do not teach a Bluetooth Standard.

However, Haartsen teaches a wireless communication between two electronic devices in the Bluetooth Standard. See the bolded paragraphs on page 110.

Additionally, Haartsen teach in the Networking column on pages 114-115, network connections between electric devices called piconets that establish connections from Bluetooth Standard standby mode, i.e. low power consumption mode, to wake-up mode, i.e. active mode.

Accordingly, it would have been obvious to one skilled in the art at the time of the invention to have used the Bluetooth Standard wireless communication taught by Haartsen in the communication system comprising the communication apparatus and intelligent terminal taught by Larsson et al. because the teachings of Haartsen teach an Ericsson Company Bluetooth wireless communication method/system that can used in the Ericsson Company wireless communication system taught by Larsson et al.

### ***Response to Arguments***

7. Applicant's arguments filed 7/1/2005 have been fully considered but they are not persuasive.

With respect to applicant's argument that Larsson does not teach execute a process for confirming the presence of data together with the confirmation device in place of the external intelligent terminal, has been considered.

In reply: Larsson clearly teaches one of the function of the mobile device is sensing the packet of fig. 6, and sensing the paging of fig. 7, indicating presence of data to be communicated; and from the conclusion of sensing result, Larsson further teaches executing a process to confirm the presence of data by sending a paging ack signal or a capacity request to the BS (intelligent terminal) such that, in the place/location of the BS, the presence of data to be communicated is confirmed.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

***Conclusion***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to King Y. Poon whose telephone number is 571-272-7440. The examiner can normally be reached on Mon-Fri 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Moore can be reached on 571-272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

January 18, 2006



**KING Y. POON  
PRIMARY EXAMINER**